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REMARKS

In response to the above-identified Office Action, Applicants have amended claims 27, 40 and 52 and amended the specification to correct minor typographical errors. Support for the amendments to the claims can be found at page 6, lines 18-20 and page 8, lines 16-21 through page 9, lines 1-5 in the above-identified application. Accordingly, Applicants submit no new matter have been added by way of these amendments. In view of these above amendments and the following remarks, Applicants hereby request further examination and reconsideration of the application, and allowance of claims 27-66.

The Office has rejected claims 27-28, 30-32, 38-41, 43-44, 50-53, 55-56 and 62-66 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Number 6,033,226 to Bullen ("Bullen"), and claims 29, 33-37, 42, 45-49, 54 and 57-61 under 35 U.S.C. § 103(a) as being unpatentable over Bullen. The Office asserts that Bullen discloses a system (FIGS.1A-1B) and a method (FIG. 2) for training a user to operate a set of one or more devices 9 (col. 3, line 57 through col. 4, line 11):

In response, Applicants have amended claims 27, 40 and 52 to further recite "manag[ing] a set of devices required to perform the training exercise," as shown herein. Applicants respectfully direct the Office's attention to FIGS. 1A-1B in Bullen. Bullen shows a computer 6 with an interface 14 that enables a user 4 to control a single machine tool 11. Referring to FIG. 1 and page 6, lines 18-20 of the above-identified application, the "controller 24 may control ... pods 26 each of which may contain ... user devices 40_1 to 40_3." Thus, the controller 24 in the present invention is configured to enable users to directly control "the set of ... devices." As disclosed at page 8, lines 16-21 through page 9, lines 1-5 in the above-identified application, "the module permits devices to be moved between pods connected to the pod controller 24" to enable users to control as many user devices 40_1 to 40_3 as are needed for particular training exercises. Thus, the present invention provides users with an authentic training environment, as described at page 7, lines 3-4 in the above-identified application. As such, claims 27, 40 and 52 are patentable over the applied art at least for the reasons mentioned above. Since claims 28-39 and 64 depend from, either directly or indirectly, and contain the limitations of claim 27, claims 41-51 and 65 depend from, either directly or indirectly, and contain the limitations of claim 40, and claims 53-63 and 66 depend from, either directly or indirectly, and contain the limitations of claim 52, they are patentable in the same manner as claims 27, 40 and 52. Accordingly, Applicants



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respectfully submit that claims 27-66 stand in condition for allowance, such allowance being earnestly solicited.

Additionally, Applicants submit that Bullen does not anticipate, suggest or disclose "reassigning a device in the ... set of devices to a second set of ... devices" as recited in claims 38 and 62 or "a device from the first set of ... devices [being] capable of being reassigned to the second set of ... devices," as recited in claim 50. As explained above with respect to Bullen and with reference to FIGS. 1A-1B, Bullen shows a computer 6 with an interface 14 that enables a user 4 to control a single machine tool 11. Thus, Bullen cannot teach "reassigning a device in the ... set of ... devices to a second set of ... devices" because there are no means for performing such reassigning nor any first or second sets of devices to reassign the device to, only the single machine tool 11. Referring to FIG. 2 and page 8, lines 16-21 through page 9, lines 1-5 in the above-identified application, the "module permits devices to be moved between pods connected to the pod controller 24... If a user wishes to perform an assignment that needs four user devices ... the ... module 310 for user device 40_4 may be reconfigured to move user device 40_4 into pod 26_1." As a result, the present invention enables "additional devices to be interconnected to the user devices in order to replicate real-world scenarios," as disclosed at page 8, lines 8-9 in the above-identified application. Accordingly, claims 38, 50 and 62 are patentable over the applied art for this additional reason.

In accordance with 37 CFR § 1.121, attached hereto is a marked-up copy of the changes made to the specification and claims by the current preliminary amendment. The version with markings to show changes made is located in the attached Appendix A.

In view of all of the foregoing, it is submitted that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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John Campa

Registration No. 49,014

NIXON PEABODY LLP Clinton Square, P.O. Box 31051 Rochester, New York 14603 Telephone: (585) 263-1519

Facsimile: (585) 263-1600

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APPENDIX A

Version With Markings to Show Changes Made

In reference to the amendments made herein to the specification and claims 27, 40 and 52, additions appear as underlined text while deletions appear as bracketed text, as indicated below:

IN THE CLAIMS:

Claims 27, 40 and 52 have been amended as follows:

27. (Amended) A method for training a user [to operate a set of one or more devices, wherein a client computer is connected to a device controller via a network and wherein a particular user uses the client computer to communicate with the device controller via the network to perform a training exercise using the set of one or more devices], the method comprising [the steps of]:

receiving control information [at the device controller reflecting] having at least one training instruction [from the client computer] regarding at least one task to be performed as part of [the] a training exercise; [and]

[transmitting the control information from the device controller to at least one of the devices in the set of one or more devices so that the user can exercise control over the set of one or more devices for the purposes of training the user in the operation of the set of one or more devices.]

managing a set of devices required to perform the training exercise; and directing one or more of the required devices to execute the at least one training instruction.

40. (Twice Amended) A system for training users [to operate a set of one or more devices], the system comprising:

a device controller connected to a client computer via a network, [wherein] the device controller [is capable of] receiving control information from the client computer, the control information [reflecting] having at least one training instruction regarding at least one task to be performed as part of a training exercise [and transmitting the control information to any device in the set of one or more devices as part of the training exercise.]; and



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a control system that manages a set of devices required to perform the training exercise, the control system directing the one or more required devices to execute the at least one training instruction.

52. (Twice Amended) A system for training users [to operate a set of one or more devices, wherein a client computer is connected to the system via a network and wherein a particular user uses the client computer to communicate with the system via the network to perform a training exercise using the set of one or more devices], the system comprising:

a device controller including:

receiving means for receiving control information, the control information [reflecting] having at least one training instruction from [the] a client computer regarding at least one task to be performed as part of [the] a training exercise; and

[means for transmitting the control information to at least one of the devices in the set of one or more devices so that the user can exercise control over the set of one or more devices for the purposes of training the user in the operation of the set of one or more devices.]

control means for managing a set of devices required to perform the training exercise, the control means directing the one or more required devices to execute the at least one training instruction.

IN THE SPECIFICATION:

The paragraph beginning at page 6, line 10, has been amended as follows:

Figure 1 illustrates a simple block diagram of a computer-based system for training relating to devices. As shown, the system preferably includes customer premise equipment 12, a communications link 14, a firewall 16, a communications line 18, a server and controller 20, a database 22, a pod controller 24, and a pod 26. The Customer Premise Equipment (CPE) 12 [preferably includes] may include a computer 28 provided with a browser program 30 and a network application program 32. The browser 30 [is preferably] may be a browser for Internet/Intranet communications, such as a Netscape NavigatorTM browser or a Mircrosoft Internet ExplorerTM browser. The network application program 32 may be a program such as TELNET. The communications link 14 [preferably] may traverse[s] the Internet or an Intra-net. The pod controller 24 may control one or more pods



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26 each of which may contain one or more user devices 40_1 to 40_3. In [one] this embodiment, the user devices 40_1 to 40_3 are network equipment, such as CISCO type switches or routers[. In other embodiments, these], although the user devices 40_1 to 40_3 may be Programmable Logic Controllers (PLCs), Chemistry Equipment, or any other type of device. Further, a pod controller 24 may also control one or more infrastructure devices (not shown). These infrastructure devices provide an authentic environment for which a real world scenario may be written.

The paragraph beginning at page 7, line 5, has been amended as follows:

Figure 2[,] illustrates a simple block diagram of an embodiment with multiple pod controllers 24_1 to 24_3. In this embodiment, pod controllers 24_1 and 24_2 are behind firewall 16_1, and pod controller 24_3 is behind firewall 16_2.

The paragraph beginning at page 7, line 14, has been amended as follows:

The device control module 302 is used to control user accessible devices. It incorporates the control software that enables the pod control system to load starting configurations into the user devices, reset the user devices, and save final configurations. The control within this module [preferably is] may be high level and generic across all devices, increasing the modularity and maintainability of the overall system.

The paragraph beginning at page 8, line 8, has been amended as follows:

The infrastructure control module 308 allows additional devices to be interconnected to the user devices in order to replace real-world scenarios. These devices are part of the infrastructure and <u>may</u> require separate control by the pod controller <u>24</u>. As such, this module <u>308</u> provides the control of the infrastructure devices that are needed to create a real-world scenario for the user. The infrastructure devices 316 are discussed in greater detail below. Further, this module, in conjunction with device, communications, control and multiplexer modules 310, permits devices to be moved between pods connected to the pod controller 24. This will be discussed in further detail below.

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The paragraph deginning at page 10, line 14, has been amended as follows:

The server and controller 20 may send either static or dynamic web pages to the user's CPE 12 so that they may be displayed to the user through their browser. The content of the user interface page may [contain] include buttons and hot links for the user to invoke the device-specific operations that may be necessary to control the user devices for the purposes of accomplishing a lab or course.

The paragraph beginning at page 11, line 18, has been amended as follows:

Figure 5 provides a flow diagram for the computer based training system of Figure 1. A user initializes the system by instructing the browser 30 on his/her computer 28 to connect to the server and controller 20 (\$502). The firewall 16 [is preferably] may be set up to allow the browser 30 and server and controller 20 to freely communicate. The server and controller 20 [preferably] may display[s] a page to the user requesting an account identification and password and [then] use[s] this information to determine if the user has an account (S504). Figure 6 illustrates an example html page 600 that may be displayed to a user to request a user's account identification 602 and password 604. The user can then click on the submit button 606 to submit the information once it has been entered. The user account may contain, among other things, a course for the user and course specific information. If the user has an account, the course is selected and started (\$506). If the user does not have an account, he/she is directed to a page for setting up a user account (S518). For example, as illustrated in Figure 6, a user without an account identification is directed to click on a Register button 608. Figure 7 illustrates an html page 700 that may be used for setting up a user account. This page may request, for example, his/her name 702, address 704, a user name 706, and a password 708.

The paragraph beginning at page 15, line 1, has been amended as follows:

In one embodiment, a user devices 40_1 to 40_3 are CISCO-type routers and are connected to the pod controller through a COM port. In this embodiment, the pod controller 24 converts the user information from the application layer format it is received in (for example, TELNET) to a format that can be sent to the router through the router's COM port. This is [preferably] may be accomplished by the user communications module 304 of the pod controller 24.